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Planetary Boundary Layer Combined Air Pollution and Meterological Investigation within LIFE- AirAware in Bucharest Area

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Understanding of the urban air pollution processes (emission, transport and transformation and imissions) is clearly demanding the monitoring of meteorological parameters simultaneous with air pollution at the Planetary Boundary Layer scale. In this context the results of an experimental set-up (SODAR, SONICS, air pollution point monitors and meteorological stations) will be presented and discussed. The SO2, NOx and O3 monitoring at ground and above ground level will be interpreted together with the wind profiling up to 500 m and the turbulence at ground level. The various regimes and typical diurnal cycles will be presented but also particular focus for example using SO2 as tracer of the air pollution effects during the Russians gases crisis on December 2008. This monitoring experiment is part of the LIFE AirAware project at the Afumati station located in Eastern side of Bucharest city in Romania.